

PROJECT SOLUTIONS

Project: Bruce Peninsula Health Care
Application: Duct Silencers (Centrifugal Fan Systems)

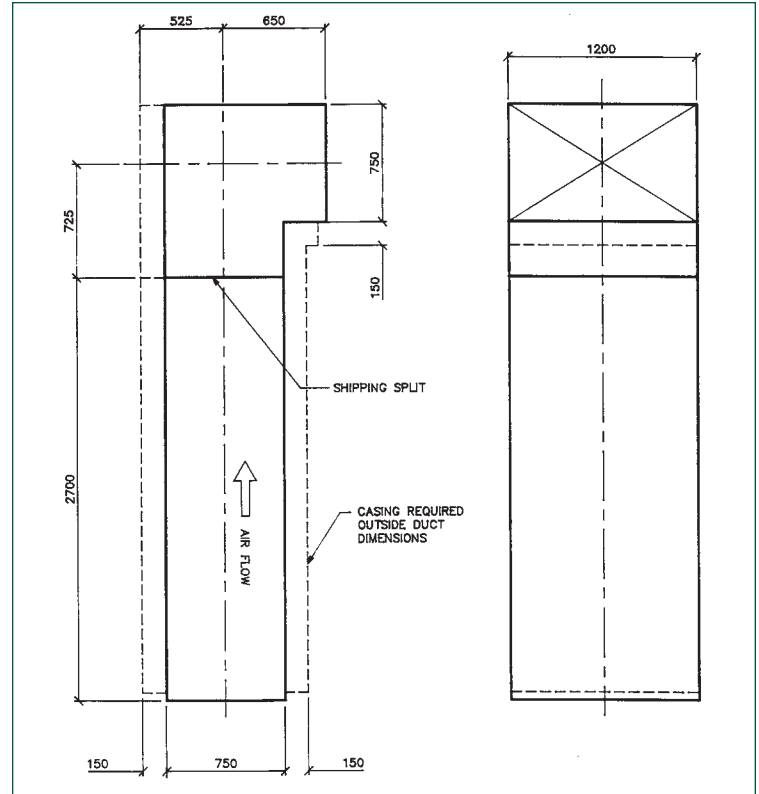
Fan silencing in health care facility achieved without the use of glass fiber.

PROBLEM: Acoustical duct lining

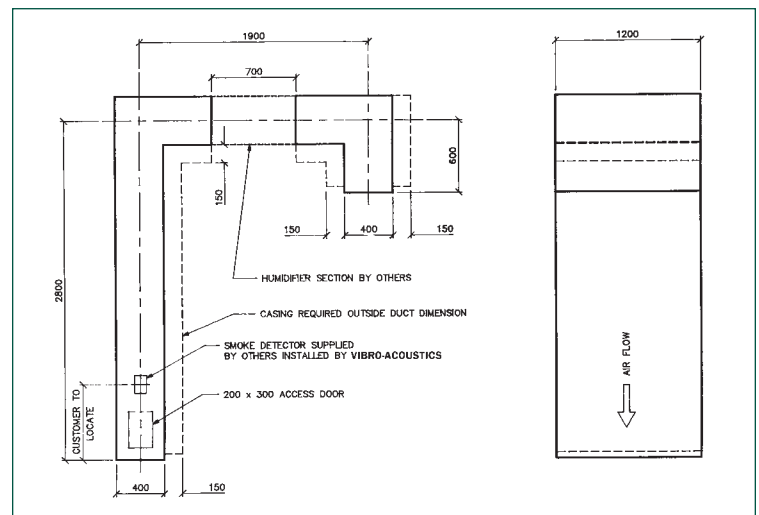
Government guidelines do not permit the application of internal duct lining in health care facilities. To compound the problem, the acoustic insertion loss requirements were substantial due to the low noise criteria needs of the space.

SOLUTION: No-media silencing systems

Since there were no long lengths of straight duct and acoustic insertion loss needs were great, most of the silencing systems included duct fittings, particularly elbows. In addition, accommodation had to be made to install and access such duct accessories as smoke detectors and humidifiers. It must be noted that internal insulation should not be installed near humidifiers. Insulation exposed to dirt and high vapor pressure or water particles is a great breeding ground for micro-organisms.



Typical installation drawing of standard no-media silencing system which includes one standard straight and one standard elbow silencer in series. Note: Installation space was extremely tight. The solid lines indicate contract drawing and connecting duct sizes. The dotted lines indicate the larger silencer outside body dimensions required to achieve the specified performance.



More complex no-media silencing system accommodates smoke detector and humidifier section.